

Distinguished scientists in all disciplines are invited to lecture on topics of general interest. Objectives include the cross-fertilization of research initiatives at various institutions and the identification of possible uses of the Advanced Photon Source.

When: First Wednesday of each month at 3:00 p.m. Where: Building 402, APS Auditorium

\*Refreshments served at 2:45 p.m.

May 7, 2003

## Meenakshi Wadhwa

The Field Museum (Chicago) and University of Illinois at Chicago

## "What We Can Learn about Mars from the Martian Meteorites"

Meenakshi Wadhwa is associate curator for meteoritics at The Field Museum (Chicago), associate professor at the University of Illinois at Chicago and lecturer at the University of Chicago. In recognition of her work on the Martian meteorites, asteroid 8356 (a Mars crossing asteroid) was named "8356 Wadhwa" by the International Astronomical Union. Meenakshi Wadhwa is a member of NASA's Curation and Planning Team for Extraterrestrial Materials (CAPTEM)", the Meteoritical Society Council and is the panel chief for NASA's Cosmochemistry Program Review Panel.

Abstract: Although in recent years there has been a wealth of remote-sensing spacecraft data returned from Mars, there are many questions regarding the evolution of Mars as a planet that can only be addressed through detailed analyses of samples in laboratories on Earth. There are about two dozen meteorites thought to originate from Mars, and these represent the only samples of the Martian crust available for analyses. In this talk, some recent results from geochemical and isotopic analyses of the Martian meteorites will be discussed. Implications for the evolution of the Martian atmosphere, hydrosphere, mantle and crust will be presented.

http://www.aps.anl.gov/conferences/APSColloquium